

## Metamorphic Rock

- The word “metamorphic” means to “\_\_\_\_\_”.
- In metamorphic rocks the structure, texture, or composition of the rock has changed.
- Rock can undergo metamorphism by \_\_\_\_\_ or \_\_\_\_\_ alone, or by a combination of the two.
- Metamorphism takes place at depths greater than 2 km and temperatures between \_\_\_\_\_ °C and \_\_\_\_\_ °C.

### Types of Metamorphism:

- \_\_\_\_\_ – Rock that comes into contact with \_\_\_\_\_ and is “cooked”.
- \_\_\_\_\_ – Occurs when enormous pressure builds up on a rock buried deep within the Earth or when pieces of the Earth’s \_\_\_\_\_ collide.

## **Composition of Metamorphic Rock:**

- **The composition of metamorphic rock changes when minerals that were present in the original rock are no longer \_\_\_\_\_ in the new environment.**
- **The original minerals change into minerals that are more stable in the new conditions.**
- **Some minerals form only at certain temperatures and pressures. These minerals are known as \_\_\_\_\_ *minerals*.**
- **Index minerals present in a metamorphic rock allow scientists to estimate the temperature and pressure conditions the rock formed under.**

## **Types of Metamorphic Rock:**

- **Foliated** – The texture of metamorphic rock in which the mineral grains are \_\_\_\_\_ like the pages of a book.
  - **Pressure aligns the grains in a foliated metamorphic rock.****EX: gneiss, schist, slate**



- **Nonfoliated** – The texture of metamorphic rock in which mineral grains show no alignment.
  - **Usually made of just one or a few minerals.****EX: marble, quartzite**

